

**Preliminary Program for 1st SEG International Microseismic Technology Workshop**  
**17-22 August 2014    Asheville, North Carolina**

<b>Sunday, August 17, 2014</b>		
<b>4:00 PM</b>	<b>7:30 PM</b>	<b>Registration/Check-in    Burghley B</b>
<b>6:00 PM</b>	<b>7:30 PM</b>	<b>Welcome Reception    Burghley B</b>
		Dinner on Own

<b>Monday, Augst 18, 2014    All</b>		
<b>7:00 AM</b>	<b>5:35 PM</b>	<b>Registration/Check-In    Burghley Pre-Function Area</b>
<b>7:45 AM</b>	<b>8:00 AM</b>	<b>Welcome and Safety Information    All Technical Oral and Poster Sessions will be in Burghley B</b>
<b>Session 1: <i>Acquisition and Processing I</i></b>		
<b>8:00 AM</b>	<b>8:35 AM</b>	Advantages of Patch Acquisition and Processing for Surface Microseismic Data    Ted Shuck    NanoSeis
<b>8:35 AM</b>	<b>9:10 AM</b>	Vector Scanning: Instruments and Seismic Network    Chen Shen    Sinopec
<b>9:10 AM</b>	<b>9:45 AM</b>	Receiver Based Analysis of Microseismic Recordings: A Tool for Assessing Quality of Time Picks and Event Locations    Anton Reshetnikov    Freie U. Berlin
<b>9:45 AM</b>	<b>10:15 AM</b>	<b>COFFEE BREAK    Burghley Pre-Function Area</b>
<b>10:15 AM</b>	<b>10:50 AM</b>	Semblance for Microseismic Event Detection    Frantisek Stanek    IRSM
<b>10:50 AM</b>	<b>11:25 AM</b>	Picking versus Stacking in Modern Microearthquake Location: Comparison of Results from a Passive Seismic Monitoring Array in Oklahoma    Jeremy Pesicek    Spectraseis
<b>11:25 AM</b>	<b>12:00 PM</b>	PANEL DISCUSSION
<b>12:00 PM</b>	<b>1:00 PM</b>	<b>LUNCH    Vanderbilt Room</b>
<b>Session 2: <i>Acquisition and Processing II</i></b>		
<b>1:00 PM</b>	<b>1:35 PM</b>	Automatic Arrival Picking Using Super-Gaussian Minimum Uncertainty Wavelets    Evgeny Chesnokov    U Houston
<b>1:35 PM</b>	<b>2:10 PM</b>	Tilted TI models in Surface Microseismic    Vladimir Grechka    Marathon Oil
<b>2:20 PM</b>	<b>2:45 PM</b>	Microseismic Reservoir Tomography    Dave Diller    NanoSeis
<b>2:45 PM</b>	<b>3:20 PM</b>	Joint Inversion Method for Microseismic Data    Pavan Elapavuluri    Rare Services Inc
<b>3:20 PM</b>	<b>3:50 PM</b>	<b>COFFEE BREAK and POSTER INTRODUCTIONS    Burghley</b>
<b>3:50 PM</b>	<b>4:25 PM</b>	POSTER SESSION Tomography of the Marcellus Shale Using Downhole Microseismic Data Improving Detection Capability of Microseismic Events Using Array Processing    Yunhui Tan Tae-Seob Kang    Penn State U Pukyong Natnl. U
<b>4:25 PM</b>	<b>5:00 PM</b>	POSTER SESSION Data Processing in Vector Scanning Microseismic Event Location Using First and Reflected Arrivals    Beiyuan Liang Nidhal Belayouni    Geomage LLC Magnitude

5:00 PM	5:35 PM	PANEL DISCUSSION		
5:35 PM	6:35 AM	Networking Happy Hour		
DINNER ON OWN				

<b>Tuesday, August 19, 2014</b>				
<b>Session 3: Source Mechanisms I</b>				
8:00 AM	8:35 AM	Simultaneous Estimation of Source Parameters for VTI Media Using Waveform Inversion	Oscar Jarillo	Co. School of Mines
8:35 AM	9:10 AM	The Signature of Shearing Driven by Hydraulic Opening	James Rutledge	SLB
9:10 AM	9:45 AM	Controlling Parameters of Fluid-Induced Event Magnitudes: Frequency-Magnitude Distribution in Finite Perturbed Volumes	Carsten Dinske	Freie U Berlin
9:45 AM	10:15 AM	COFFEE BREAK <i>Burghley Pre-Function</i>		
10:15 AM	10:50 AM	Multi-scale Waveform Inversion for Micro-Seismic Source Estimation	Huang Chao	Tongji U
10:50 AM	11:25 AM	Interpretation of Families of Observed Microseismic Source Mechanisms	Barry Fish	NanoSeis
11:25 AM	12:00 PM	Phase Squared Location Imaging of a General Moment Tensor Source	Julian Drew	SLB
12:00 PM	1:00 AM	LUNCH <i>Vanderbilt Room</i>		
<b>Session 4: Source Mechanisms II and Uncertainties</b>				
1:00 PM	1:35 PM	Automated Joint Detection, Location and Source Mechanism Determination of	Denis Anikiev	St. Petersburg St. U
1:35 PM	2:10 PM	Best Monitoring Practices for Characterization of Large Microseismic Sources	Katherine Bosman	ESG
2:10 PM	2:45 PM	A Method for Establishing Location Uncertainty in Surface Microseismic Data	Kit Chambers	Halliburton
2:45 PM	3:15 PM	COFFEE BREAK <i>Burghley Pre-Function</i>		
3:15 PM	3:50 PM	Analysis of Uncertainties in Microseismic Monitoring Using Downhole Arrays	Juan Reyes-Montes	Applied Seismology
3:50 PM	4:25 PM	The Precision of Microseismic Locations	Taylor	Sigma <sup>3</sup>
4:25 PM	5:00 PM	PANEL DISCUSSION		
5:00 PM	6:00 PM	Networking Happy Hour <i>Burghley Pre-Function</i>		
DINNER ON OWN				

<b>Wednesday, August 20, 2014</b>				
<b>Session 5: Modeling and Geomechanics</b>				
8:00 AM	8:35 AM	Adding Value to Microseismic Monitoring with Calibrated Geomechanical Model	Ingo Geldmacher	Weatherford
8:35 AM	9:10 AM	Simulation of Microseismic in Geomechanical Models of Fractured Rock	Jim Hazzard	Itasca
9:10 AM	9:45 AM	3D Finite Difference Modeling of Microseismic Source Mechanisms in the Wolfcamp Shale of the Permian Basin	Robert Meek	Geophysical Technical

9:45 AM	10:15 AM	COFFEE BREAK		
10:15 AM	10:50 AM	Maximum Magnitudes for Frac-Related Seismicity: Observations from Different Formations Across North America	Adam Baig	ESG
10:50 AM	11:25 AM	Imaging Spatial and Temporal Variations in Rock Properties with Moment Tensor Derived Vp/Vs Ratios	Lindsay Smith-Boughner	ESG
11:25 AM	12:00 PM	PANEL DISCUSSION		
LUNCH AND DINNER ON OWN		AFTERNOON FREE FOR NETWORKING/RECREATION		

Thursday, August 21, 2014					
Session 6: Interpretation and Case Studies I					
8:00 AM	8:35 AM		Uncertainty propagation and probabilistic interpretation of microseismic attributes	Ulrich Zimmer	Shell
8:35 AM	9:10 AM		Putting the Seismic Into Microseismic	Rodney Johnston	BP
9:10 AM	9:45 AM		Calculating Stimulated Reservoir Volume and Fluid Flow Utilizing Microseismicity	Adam Baig	ESG
9:45 AM	10:15 AM		COFFEE BREAK		
10:15 AM	10:50 AM		Seismic Efficiency, Overshoot and Enhanced Dynamic Weakening of Fractures Associated with Hydraulic Fractures: Implications on Barriers to Stimulation of Fractures	Gisela Viegas	ESG
10:50 AM	11:25 AM		Extending Scaling Relations of HF Seismicity to -3>M>+3": Implication on Interpretation and HF Design	Ted Urbancic	ESG
11:25 AM	12:00 PM		PANEL DISCUSSION		
12:00 PM	1:00 PM		LUNCH	Vanderbilt Room	
Session 7: Interpretation and Case Studies II					
1:00 PM	1:35 PM		Successful Application of Microseismicity in a Steam Injection Project, Panuco Field, Mexico	Francisco Diaz	SLB
1:35 PM	2:10 PM		Hydro-Fracture Monitoring for 86 Stages of Yan227 in Shengli Oil Field, China	Binato Zheng	Sinopec
2:10 PM	2:45 PM		High Fidelity Microseismic Data Acquisition in the Midland Basin Wolfcamp Shale Play	Robert Hull	Pioneer
2:45 PM	3:20 PM		Microseismic Using Horizontal to Vertical Spectral Ratio (HVSr) Analysis for Seismic Vulnerability Index Distribution As Basic Data of Spatial Planning and Development of Makassar City and Surrounding Areas	Rahmat Hidayat	Hasanuddin U
3:20 PM	3:50 PM		COFFEE BREAK and POSTER INTRODUCTIONS	Burghley B	
3:50 PM	4:25 PM		POSTER SESSION Interpreting Single vs Multi-Well Microseismic Event Locations Integrating Surface Seismic, Microseismic, Rock Properties and Mineralogy in Unconventional Shale Plays	Jamie Rich Prichard Pagel	OK U CGG

4:25 PM	5:00 PM	POSTER SESSION		
		Hydraulic Fracture Mapping by Surface Based Microseismic Monitoring: A Case Study of Fracturing Tight Sands Reservoir in Daqing Oil Field, China	Yang Ruzihao	China U of Mining & Technology
		Microseismic Data Confirming Existence of Seismically Predicted Fracture Barrier: A Case Study of Fracturing Tight Sands Reservoir on Ordos Basin, China	Zhengguang	China U of Mining & Technology
		Empirical Ground Motion Prediction Equation for Induced Seismicity Related to Hydraulic Fracture Stimulation	Sepideh Karimi	ESG
5:00 PM	5:35 PM	PANEL DISCUSSION		
5:35 PM	6:35 PM	FREE TIME		
6:30 PM	8:30 PM	GROUP DINNER      Garden Terrace		

Friday, August 22, 2014				
Session 8: <i>Miscellaneous</i>				
8:00 AM	8:35 AM	Microseismic Integrated Advanced Geophysics	Chesnokov	U Houston
8:35 AM	9:10 AM	Reducing velocity model uncertainty and improving microseismic event location accuracy: Crosswell seismic tomography using a repeatable downhole sparker source	Wills	Avalon
9:10 AM	9:45 AM	Dominant Frequency Mapping in Microtremor Data by Horizontal-Vertical Spectral Ratio Method	Kusumawardani	Gadjah Mada U
9:45 AM	10:15 AM	Summary Discussion & Concluding Remarks	Werner Heigl Vladimir Grechka	Apache Corp. Marathon Oil

